MISCELLANEOUS NOTES

1. STUMPTAILED MACAQUE MACACA ARCTOIDES (GEOFFROY) IN MANIPUR

During a visit to Manipur in April 1988 I came across three adult male stump-tailed macaques *Macaca arctoides* in the small zoo near Imphal city. All the three had been reportedly collected from the forests of Churachandpur district (23°57'N to 24°40'N, and 93°0'E to 93°50' E). They had not been identified, and about a dozen Assamese macaques *Macaca assamensis*, also locally collected and kept in a separate enclosure, had been wrongly identified as stumptailed macaques. This is the first specific record of the stumptailed macaque in Manipur. The main stronghold of the species is perhaps the Western Hills along the Assam-Manipur border.

August 8, 1989 ANWARUDDIN CHOUDHURY

2. INTERACTION BETWEEN A MALE TIGER PANTHERA TIGRIS AND HIS CUBS IN BANDHAVGARH NATIONAL PARK, MADHYA PRADESH

The following observations were made on a male tiger *Panthera tigris* Banka, a tigress, Sita, and their cubs in Bandhavgarh National Park, Madhya Pradesh, over a period of 30 months.

Banka was seen mating with Sita on 28 May 1986, when she was nearly 3 years old. Three cubs were seen with Sita in November 1986 and it is assumed that they were sired by Banka.

It was also determined, by plotting on a 1:50,000 scale map locations where Banka and Sita were seen or where their tracks were positively identified, that Banka's territory encompassed Sita's.

On 1 December 1986 when the cubs were about 10 weeks old, Banka was seen at a kill along with Sita and the cubs. Neither the cubs nor Sita showed any apprehension at the presence of the male.

On 25 February 1987 only two cubs were seen with Banka and Sita at a kill. On being disturbed Sita dragged the kill and hid it under a bush on top of a hill and went to collect the cubs. When she had brought them up, she was reluctant to go to the kill because of the presence of our elephant which the cubs were not willing to pass.

In the meantime Banka got to the kill which was about 70 m behind us and began making the high nasal *aeun* sound which seems to be both a contact call and a summons. Sita and the cubs reacted to this but again the cubs were unwilling to go past the elephant. After a few minutes Banka called louder and gruffer than before and this time we moved the elephant away whereupon Sita and the cubs went to the kill immediately.

By mid-February 1988 when the cubs were approximately 17 months old, Sita showed signs of disassociating herself from the cubs and was not seen with them for long periods. After 23 March she was next seen with them until 13 April. On 15 March Banka was seen in company with the cubs and the female cub was seen playing with him. They would also follow him around wherever he moved. All 3 tigers were seen together the whole day and on 18 March 1988 they were seen together again with the male cub close to Banka and the female cub 100 m away. There was no sign of Sita on any of these occasions.

On 13 April 1988 Mr. H.S. Pabla the then Director of the Park, and Mr. Vivek R. Sinha, saw Sita behaving aggressively towards her cubs. The cubs were then approximately 19 months old. Possibly this marked the beginning of the period leading the cubs to independence.

I would like to express my thanks to Dr Charles Mc-Dougal for his encouragement to write this note and to Vinay Asar and family for all their help.

August 30, 1989

НАЅНІМ ТҮАВЛ

3. SIGHTING OF THE RUSTY SPOTTED CAT FELIS RUBIGINOSA (GEOFFROY) IN SHOOLPANESHWAR SANCTUARY, GUJARAT

The habitat of Shoolpaneshwar Sanctuary (21°23'N -21°59'N and 73°05'E-74°10'E) in Bharuch district, Gujarat, comprises of semi-moist deciduous to dry deciduous forest. The major floristic elements are teak *Tectona grandis* and bamboo *Dendrocalanus strictus*. The terrain is hilly and comprises of Deccan Trap basalt.

The rusty spotted cat *Felis rubiginosa* (Geoffroy) was first sighted on 26 November 1990 at 2230 hrs in a stream bed surrounded by dense forest near Namgir village. It was possible to observe it for 6.5 min. with the help

of a 4 cell torch from about 2 to 3 m.

The second sighting of the cat was made on 16 December 1990 at 2200 hrs in a small cultivated area near the same stream. This observation was made for about 3 min. and confirmed by S.A. Chavan. Since we had the photographs of the rusty spotted cat (taken in Gir by Bharat Pathak) there was no possibility of misidentification.

This cat had been recorded earlier in Dangs forests by H.H. Maharaja of Bansda. As Rajpipla forests, Sagbara,

4. BEHAVIOUR OF A JACKAL CANIS AUREUS AT A LEOPARD PANTHERA PARDUS KILL

March 12, 1991

On 2 March 1990 I sat over a cow killed by a leopard *Panthera pardus* in a ravine near Perohit-ji-ka-Talab, a small lake near Udaipur. The blind was 15 m from the kill and I took up my position in the hide at 1530 hrs. After a lapse of an hour I heard the alarm call of langur *Presbytis entellus* and 15 minutes later I saw a leopard descending on my right into the ravine. Probably it noticed the unnatural construction near the kill and sensed some danger so it stopped about 100 m from me behind some bushes, almost concealed from me. After some time it rose, took a long detour around the hide and took up its position about 40 m from the hide. Only the tail of the leopard was visible from my position. Here the terrain was undulating and strewn with boulders and thick bushes. Towards my left it was comparatively flat, with a few bushes.

Just before dusk I spotted a jackal *Canis aureus* approaching the kill from the left. It was in a highly nervous

Mandvi, Vyara and Dangs formed a continuous corridor of moist deciduous forests in the past, there is every possibility that this species existed in this belt, but had not been identified earlier in Rajpipla forests.

> S.A. CHAVAN C.D. PATEL S.V. PAWAR N.S. GOGATE N.P. PANDYA

state, stepping carefully, sniffing constantly up and down and occasionally whipping around to look behind. It came to the kill and before feeding on it again looked carefully around.

At this moment the leopard gave a loud cough. The jackal turned round like lightning gave a low whining sound and fell head over heels. Regaining its feet it tried to run hard, but after taking two or three steps it again fell and did a complete somersault. It turned four somersaults, twice fell headlong on the ground and finally disappeared from sight. The leopard did not even rise to its feet. As darkness approached I left the blind and was greeted by the leopard with growls. On many occasions I have seen jackals on leopard kills but have never seen a jackal in such a panic.

April 4, 1990

RAZA TEHSIN

5. FOOD PIRACY BY JACKAL CANIS AUREUS FROM A JUNGLE CAT FELIS CHAUS IN CHHARI-DHANDH, KUTCH

On 27 May 1990 at 1930 hours, we were on a general reconnaissance of the terrain around Fulay village in Chhari-Dhandh, Kutch, Gujarat. About 4 km west of Fulay, we saw a jungle cat *Felis chaus* preying on a snake, and when observed it was walking, carrying its prey. Sud-denly, from behind an *Euphorbia* thicket a jackal *Canis aureus* emerged and sprang on the cat, in an obvious attempt to snatch its prey. The cat resisted the jackal's efforts for some time during which a brief struggle ensued between the two. The jackal chased the cat for some distance and almost grabbed the prey during the first few at-

tempts, but each time the cat managed to evade its assaults.

Finally the jackal snatched the dead snake from the cat, and disappeared behind the rocks. The cat too left the area after a brief attempt to regain its prey. This is the first instance of food piracy by a jackal from a jungle cat. Snakes have not been listed as a food item of either the jungle cat or the jackal so far.

November 16, 1990

S. ASAD AKHTAR J. K. TIWARI